

*Kaiser Permanente Clinical
Research: The Engine of Health
Care Innovation and Quality*

Presenter:

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Associate Executive Director

Cancer Research Symposium

Mortality Rates and Years of Life Lost (YLL) for KP Members

Kaiser Permanente (KP) partners with Institute for Health Metrics and Evaluation (IHME)

- KP members vs. non-members in KP communities vs. overall US population: 2010-2019 (pre-COVID) and 2019 to 2022 (COVID-19 era, KP and US only)

Findings (2010-2019):

KP members had lower age-standardized mortality rates (21%) and YLL rates (34.5%) than community non-members (and US overall)

- Mortality rates among KP members were lower than in the community for all racial and ethnic groups, especially Am Indian, Alaska Native, Black populations

Findings (2019-22):

KP members had a lower percentage increase in mortality rates compared to US (community data not available).

NEJM
Catalyst

JOURNAL ▾

IN DEPTH

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Using Mortality and Years-of-Life-Lost Metrics to Evaluate Health System Performance and Inform Health Care Policy

Authors: Elizabeth A. McGlynn, PhD, Laura Dwyer-Lindgren, PhD, MPH, Anna C. Davis, PhD, Zhuochen Li, MS, John L. Adams, PhD, and Ali H. Mokdad, PhD [Author Info & Affiliations](#)

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Why Clinical Research in a Health Maintenance Organization

Bridge between discovery and improved patient care

Integration into care delivery accelerates adoption of evidence-based practice, drives **value** (outcomes/cost)

Accelerated translation of research into practice

Enhances innovation and quality improvement beyond the area of focus

EMR and structure afford:

- Real-world evidence

- Large-scale studies

- Diverse –population studies

KPNC Oncology Research:

- ASCO Quality Training Program

- Invitation to Host West Coast Learning Collaborative

- Disparities via Population-Based Initiatives

- Incorporation of AI into Care Delivery

- Nation Leading Recruitment in NCI's Community Oncology Research Program (NCORP)



Hematology Oncology Fellowship Leads Quality Program

ASCO QUALITY TRAINING PROGRAM ALUMNI INTEGRATE QUALITY IMPROVEMENT INTO FELLOWSHIP PROGRAM



DR. LIU

Driven by their passion for quality improvement, Raymond Liu, MD, and Jed A. Katzel, MD, of Kaiser Permanente San Francisco Medical Center, successfully integrated quality training into their institution's hematology and oncology fellowship training program, and achieved extremely impactful results.

Kaiser Permanente started its Hematology Oncology Fellowship Program in 2019. As graduates of ASCO's Quality Training Program (QTP), Dr. Katzel and Dr. Liu saw the opportunity to get the first fellowship class involved in QTP, with the collaboration of Kaiser colleagues in ASCO QTP leadership positions, including Piyush Srivastava, MD.

ASCO's QTP guides teams of two to five people from oncology practices through a complete quality improvement (QI) project while providing coaching, training, and resources. QTP uses a data-driven method to identify site-specific improvement opportunities. Once an issue is identified, the teams work with ASCO experts over a 6-month period to complete the quality improvement project.

"Six months can sound like an intimidating speed to finish a full QI project, but with the timing of our fellowship it works out perfectly," said Dr. Liu. "[The fellows] finish the project before their fellowship ends, they gain new mentors from outside the institution, and they have something written that is ready for publication submission."

Rather than being assigned a project by institution leadership, the first fellowship

class at Kaiser was given full freedom to identify an issue that they wanted to fix. They chose to focus on the delay from diagnosis to next-generation sequencing (NGS) results in patients with stage IV non-small cell lung cancer. Through improved communication and automated interventions in their electronic medical records, the Kaiser team was able to reduce their median days from 24 to 16. Their project's success led to organizational change as the automations were applied system-wide, ultimately impacting Kaiser's 4 million patients.

"Having the fellows identify an issue made them passionate about the work, which makes it more fulfilling and leads to positive outcomes," Dr. Katzel said.

After the success of the 2019 project, every subsequent class of Kaiser's hematology oncology fellows has participated in the QTP.

In addition to having fellows be involved in QI projects at the ground level, Dr. Liu and Dr. Katzel emphasized the importance of leadership buy-in.

"We recommend meeting with leadership during the QTP process, and sharing results from the project," said Dr. Katzel. "Being able to show, through data and testing, the positive impact your QI project is having to leadership will have a more significant impact on a larger scale."

Dr. Liu and Dr. Katzel noted that many oncology practices are likely already doing QI projects without referring to them as such. Participating in a round of



DR. KATZEL



DR. SRIVASTAVA

the QTP can offer an effective and structured problem-solving methodology that can be applied to many other practice issues.

Dr. Liu and Dr. Katzel thanked their Kaiser colleague Dr. Srivastava, who serves as QTP faculty and coach and is the ASCO QTP Steering Group chair-elect, for his continued support through their QI journeys.

Want to get involved? Apply for ASCO's Winter QTP session at asco.org/qtp. Participating fellows may be eligible to receive a tuition discount. QTP can also be brought to your institution for a private session for any audience, including your fellows. Email qualitytraining@asco.org with any questions. ●

Fellow Projects and Posters / Papers



Improving Time to Genomic Test Results

[Improving Time to Molecular Testing Results in Patients With Newly Diagnosed, Metastatic Non-Small-Cell Lung Cancer | JCO Oncology Practice](#)



Implementing Goals of Care Documentation

[I-DO GOC: Improving documentation in oncology with goals of care. | Journal of Clinical Oncology](#)

[What Matters Most: The Documented Goals, Values and Motivators of Advanced Cancer Patients - PubMed](#)



Assessing & Addressing Survivor Needs

[The voice of the breast cancer survivor: Implementation of survivorship needs assessment in an integrated health system. | Journal of Clinical Oncology](#)



Improving Cancer Vaccine Uptake

[Improving bivalent COVID-19 vaccination rates among adult patients with cancer: An ASCO/CDC initiative. | JCO Oncology Practice](#)



Improving Equity Cancer Clinical Trial (ongoing project)

Association between Improved Colorectal Screening and Racial Disparities

C.A. Doubeni, MD MPH, D.A. Corley, MD PhD, W. Zhao MPH, Y. Lau PhD, MPH C.D. Jensen PhD, T.R. Levin, MD

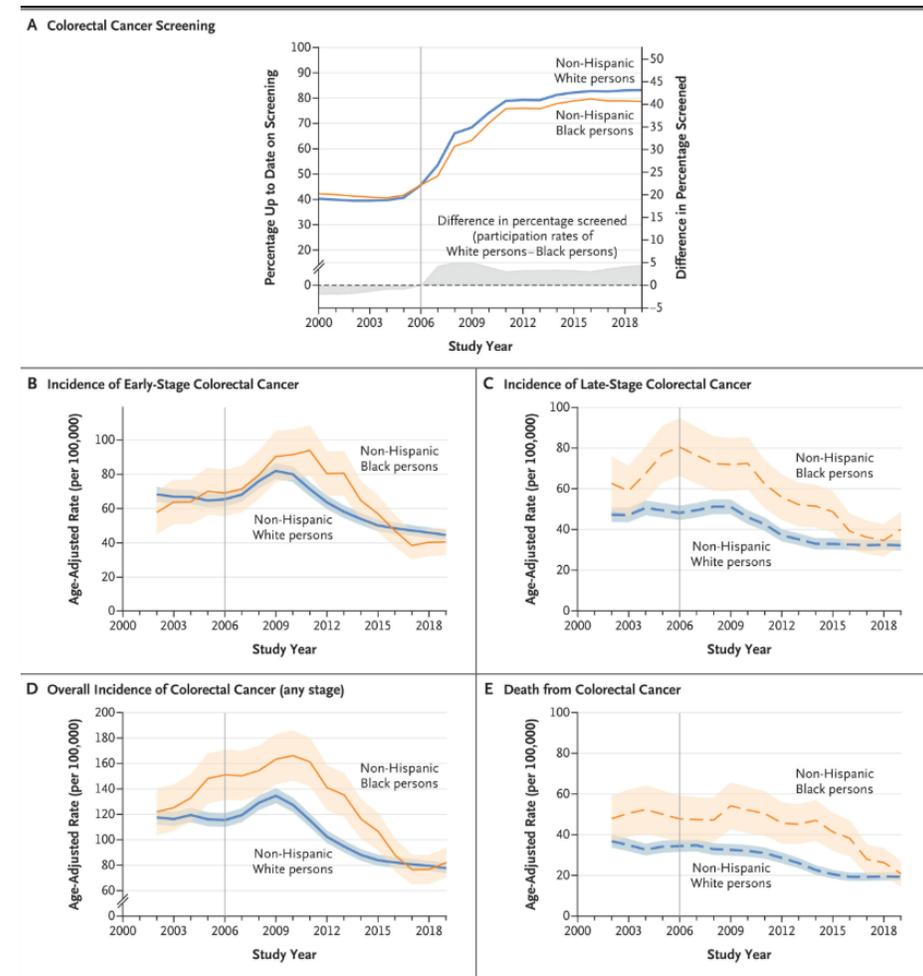
Kaiser Permanente Northern California launched an organized population-based screening program using mailed FIT tests and on-request colonoscopy (2000-2019)

Screening rates: Increased ~40% (2000) to ~80% (2015-2019) for Non-Hispanic Black and White adults 50-75 y.o.

CRC Incidence: Initially rose with increased detection, then sharply declined, converged between groups

Mortality: Decreased from 54-→21 per 100K among Black persons and 33-→20 per 100K among White persons, narrowing mortality gap from 21.6 to 1.6 per 100K

Integrated, population –based screening and follow up substantially **reduces/eliminates** racial disparities



AI Risk Stratified Outreach for Mammography

The addition of AI predicts the majority of women who will develop breast cancer (retrospective 2016):

75% (AI + Traditional Risk Factors) vs.
35% (Traditional Risk Factors)

AI-based Risk Stratified Outreach to “Tackle” the Mammography Backlog (2019-2021)

Women with AI risk in the top 30% had 54% of all cancers that later developed

Combining AI with traditional risk factors predicts 75% of all women who develop breast cancer

The PROMPT Breast Cancer Screening group has integrated AI risk score into their reporting workbench to prioritize outreach

Enables population wide personalized outreach based on their risk.

Radiology

ORIGINAL RESEARCH • BREAST IMAGING

Comparison of Mammography AI Algorithms with a Clinical Risk Model for 5-year Breast Cancer Risk Prediction: An Observational Study

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Clinical Trial Program: Challenging the Status Quo

Omitting Regional Nodal Irradiation after Response to Chemotherapy

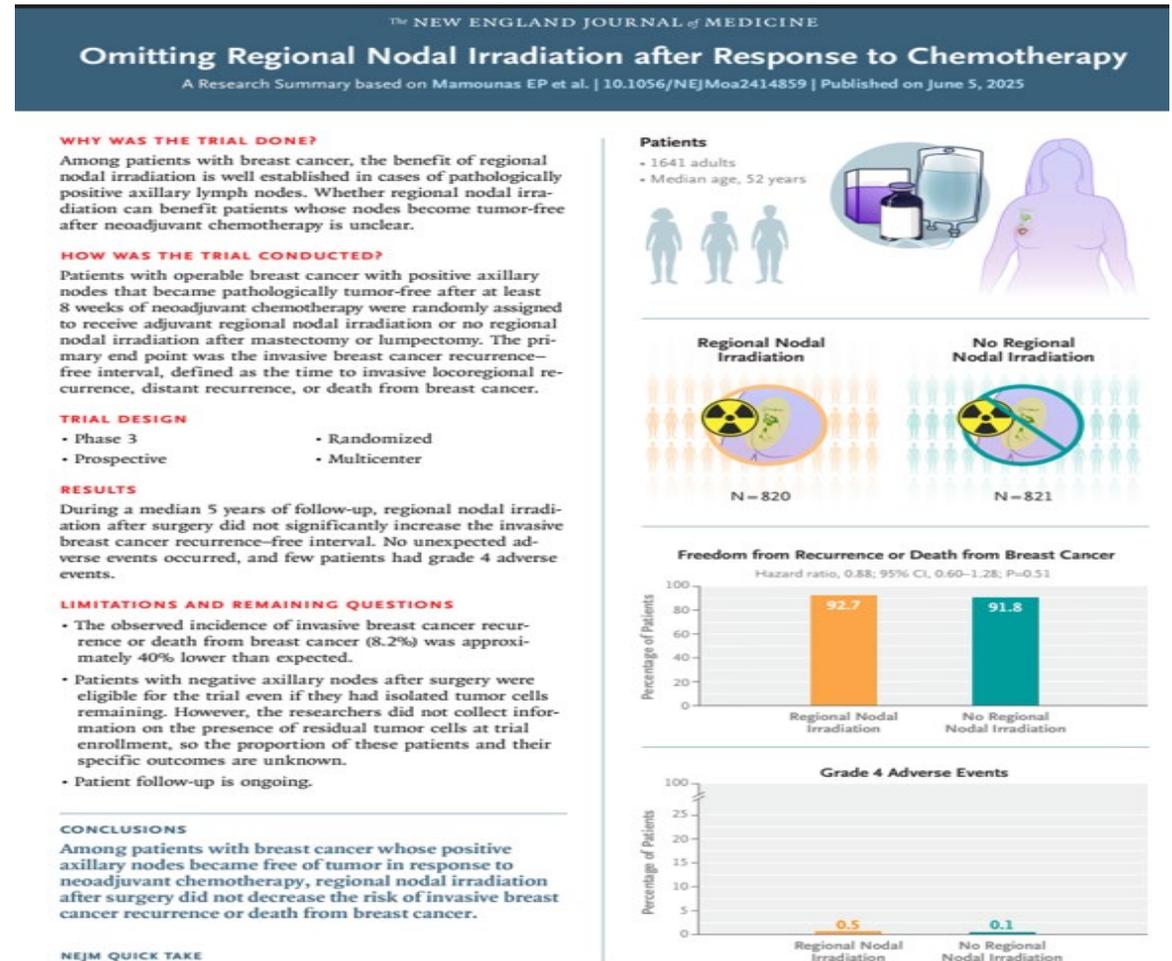
Operable breast cancer with positive axillary nodes that became pathologically tumor-free after 8 weeks of neo-adjuvant chemotherapy

Randomly assigned to adjuvant regional nodal irradiation or none after mastectomy or lumpectomy

Primary endpoint: invasive breast cancer recurrence

Phase 3 Prospective, Randomized, Multi-center

5-year follow-up: regional nodal irradiation after surgery did not significantly increase the invasive breast cancer recurrence-free interval



The Future is Bright

Stable NIH/NCI Funding via Congressional Actions!

Continued GME Program Research Development and Funding

Celebrate Nation Leading Recruitment in NCI Community Oncology Research Program AND...

Establish a scalable, enterprise-wide clinical trials program at Kaiser Permanente (KP): number, diversity, geographic reach...

Improved Member Experience

Clinician Recruitment and Retention

Strategic Accreditations

Reputational Enhancement

Enhanced Quality and Value

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“To know even one life has breathed easier because you have lived; that is to have succeeded.”

—Ralph Waldo Emerson

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